

## SUMMARY

This report presents the results of the travel time and speed surveys for the Alameda County Congestion Management Program (CMP) network for the year 2008. The results indicate that generally speeds on freeways and arterials have slightly improved, likely due to the economic downturn combined with record high gas prices. The survey program included the following elements:

- “Floating car” travel time surveys on all Alameda County freeways (151 survey segments) and designated CMP arterial roads (221 survey segments) during the 4:00 to 6:00 P.M. peak period and 7:00 to 9:00 A.M. peak period. Based on the direction of the CMA Board in 2004, all of the segments are being monitored for afternoon and morning peak periods starting 2006. Monitoring in the A.M. peak is for informational purposes only.
- Travel time surveys on selected ramp movements and “special segments” (23 survey segments) during the P.M. and A.M. peak periods.
- Travel time surveys using both auto and transit travel between ten pairs of origins and destinations.
- Bicycle Counts at twelve intersections using count data supplied by the local jurisdictions.

The following table lists the locations of figures in this report, which illustrate the levels of service on each CMP road segment in each area of the county.

Figure	Area	LOS	Time Period	Page
2	Countywide	“F” Only	A.M. and P.M.	25
3	Northern	All	P.M. Peak Hour	37
4	Upper Central	All	P.M. Peak Hour	39
5	Lower Central	All	P.M. Peak Hour	41
6	Southeastern	All	P.M. Peak Hour	43
7	Northern	All	A.M. Peak Hour	45
8	Upper Central	All	A.M. Peak Hour	47
9	Lower Central	All	A.M. Peak Hour	49
10	Southeastern	All	A.M. Peak Hour	51

## SYSTEM PERFORMANCE

### Observations on Corridor Performance

Based on the 2008 LOS monitoring results, speeds on freeways and arterials appear to have slightly improved, likely due to the downturn in the economy combined with the record high gas prices. Highlights of the roadways performance in comparison with the LOS results in 2006 are presented below:

Generally, the roadway segments found to be performing at LOS F in 2008 fall into three groups:

- Roadway segments that previously performed at LOS F in 2006 and in most of the prior monitoring years.
- Roadway segments where existing hotspots or bottlenecks were revealed in 2008 due to splitting the longer CMP segments into shorter segments.
- Roadways impacted due to construction occurring on the Bay Bridge, I-238, I-880/Mission, I-880/SR 92 interchange and I-580 west of I-580/I-680 Interchange.

### LEVEL OF SERVICE "F" SEGMENTS

The details of the LOS F segments that fall into the above three groups are presented below.

There are 13 segments in the P.M. peak period and 9 segments in the A.M. peak period that previously performed at LOS F in 2006 and in most of the prior monitoring years.

#### *2008 Segments that previously performed at LOS F*

	CMP Route	Segment Limits		Jurisdiction
		From	To	
PM Peak Period				
1	I-80 - EB	Toll Plaza	I-580 SB Merge	Oakland
2	I-80 - EB	I-80/I-580 (Merge)	Powell	Emeryville – Berkeley
3	I-80 - EB	Powell	Ashby	Emeryville – Berkeley
4	I-80 - EB	Ashby	University	Emeryville – Berkeley
5	I-80 - EB	Jct I-580 (off)	Central (on)	Berkeley – Albany
6	I-580 EB	I-680	Hopyard	Pleasanton
7	I-580 EB	Hopyard	Santa Rita	Pleasanton
8	I-880 - NB	Alv-Niles	Tennyson	Union City – Hayward
9	SR 24 - EB	Jct I-580 (on)	Broadway/SR 13	Oakland
10	SR 24 - EB	Broadway/SR 13	Caldecott (enter)	Oakland
11	SR 84 - EB	SR 84 (Off)/I-680	Vallecitos Ent.	Unincorporated County
12	SR 92 - EB	Clawiter	I-880	Hayward
13	SR13/SR 24 Interchange	SR-13 NB	SR-24 EB	Oakland

	<i>AM Peak Period</i>			
14	I-80 - WB	Central	Jct I-580	Berkeley – Albany
15	I-80 - WB	Jct I-580	University	Berkeley – Albany
16	I-580 - WB	1 <sup>st</sup> St	Portola Ave	Livermore
17	I-580 - WB	SH-24 On-ramp	I-80/580 Split	Oakland
18	I-880 - NB	Alv-Niles	Tennyson	Union City – Hayward
19	I-880 - SB	I-238 (Marina before 06)	A St	San Leandro- Unincorporated County
20	SR 24 - EB	Broadway/SR 13	Caldecott (enter)	Oakland
21	SR13/SR 24 Interchange	SR-13 NB	SR-24 EB	Oakland
22	I-880/SR 260 Connection	SR-260 EB	I-880 NB	Oakland

In the 2007 CMP, many longer CMP segments, primarily freeway segments, were split into shorter CMP segments to reflect changes in land use and traffic patterns that had occurred since the adoption of the CMP network in 1991. There are 10 segments in the evening peak period and 3 segments in the morning peak period that revealed existing hotspots or bottlenecks in 2008 due to splitting the longer CMP segments into shorter segments.

***Existing hotspots or bottlenecks revealed in 2008 due to splitting the longer CMP segments into shorter segments***

	CMP Route	Segment Limits		Jurisdiction
		From	To	
	PM Peak Period			
1	I-580 EB	San Ramon/ Foothill	I-680	Unincorporated County Pleasanton
2	I-580 - EB	Harrison	Lakeshore	Oakland
3	I-580 EB	I-80	I-980	Oakland
3	I-680 - NB	Rt 262/Mission	Durham Rd	Fremont
4	I-680 - NB	Durham Rd	Washington Blvd	Fremont
5	I-880 - SB	Hegenberger	SR 112/ Davis	Oakland – San Leandro
6	SR 13 - SB	Redwood	Jct I-580 (EB Merge)	Oakland
7	SR 84 - EB	Thornton Ave/Paceo Padre	Newark Blvd/ Ardenwood Blvd	Newark
8	SR 84 - EB	Newark Blvd/ Ardenwood Blvd	I-880 NB (off)	Newark
9	SR 84 - EB	Sunol Rd	Plea-Sunol Rd	Fremont
10	SR 185 (Int'l Blvd) - NB	46th St	42nd	Oakland
	AM Peak Period			
11	I-580 - WB	Greenville Rd	1st St	Livermore- Unincorporated County
12	I-580 - WB	Portola	SR 84/Airway	Livermore-Pleasanton
13	SR 84 - EB	Sunol Rd	Plea-Sunol Rd	Fremont

The following are the roadway segments impacted due to construction occurring on the Bay Bridge, I-238, I-880/Mission, I-880/SR 92 Interchange and I-580 west of I-580/I-680 Interchange. Eight segments during the P.M. peak period and 7 segments during the A.M. peak period fall in this category.

***Roadway segments impacted due to construction***

	CMP Route	Segment Limits		Jurisdiction
		From	To	
	<i>PM Peak Period</i>			
1	I-80 - WB	Ashby	Powell	Emeryville – Berkeley
2	I-238 - WB	I-580	I-880	Unincorporated-San Leandro
3	Hesperian - NB	Tennyson	SH 92 - WB	Hayward
4	Hesperian - NB	La Playa	W.Winton Ave.	Hayward
5	Hesperian - NB	Grant	Llewelling	Unincorporated County
6	Hesperian - SB	14 <sup>th</sup>	Fairmont	San Leandro
7	Hesperian - SB	SH 92 – WB	Tennyson	Hayward
8	I-580/I-680 Interchange	I-580 WB	I-680 SB	Pleasanton
	<i>AM Peak Period</i>			
9	I-80 - WB	I-580 Split	Toll Plaza	Oakland
10	I-80 - WB	Toll Plaza	SF County	Oakland
11	I-238 - WB	I-580	I-880	Unincorporated -San Leandro
12	I-880 - SB	A St	Rt 92	Hayward
13	I-880 - SB	AutoMall Pkwy	Rt 262/Mission	Fremont
14	Hesperian - SB	14 <sup>th</sup>	Fairmont	San Leandro
15	SR 262 (Mission) - WB	I-680 NB	I-880 SB	Fremont

Segments that do not fall in any of the above categories and show degradation in LOS in 2008 are shown below.

	CMP Route	Segment Limits		Jurisdiction
		From	To	
	<i>PM Peak Period</i>			
1	SR 123 San Pablo - NB	Marin	Washington	Albany
2	I-880/SR 260 Connection	SR-260 EB	I-880 NB	Oakland
	<i>AM Peak Period</i>			
3	I-580 - WB	SH 13 Off	Fruitvale	Oakland

## IMPROVED SEGMENTS

Table 1 lists 15 segments that operated at LOS "F" during the 2006 surveys but operated at an improved Level of Service in the 2008 surveys. Improvement on I-880 SB between SR 262/Mission and Dixon Landing could be due to the completion of improvements to I-880/Dixon Landing Interchange. The number of improved LOS F segments from the previous monitoring year 2006 has increased to 15 segments in 2008 compared to 9 improved segments in 2006.

**Table 1 – Improved Segments  
Segments at LOS "F" in 2006 and not in 2008**

	CMP Route	Direction	Segment Limits		2006 LOS (Speed)	2008 LOS (Speed)	Prior LOS F
			From	To			
P.M. PEAK PERIOD							
1	I-80	EB	SF County Line	Toll Plaza	F(30) (24.2)	C (54.2)	06
2	I-80	WB	I-580 Split	Toll Plaza	F(20) (18.5)	E (40.4)	91-93,97- 00,04-06
3	I-238	EB	I-880	I-580	F(20) (19.2)	D (41.7)	91-92,94,96- 97,02,06
4	I-580	WB	SH 24 On-Ramp	I-80/I-580 Split	F(30) (24.2)	B (56.5)	06
5	I 880	SB	I-980	23 <sup>rd</sup>	F(30) (24.3)	C (50.1)	06
6	I-880	SB	High/42 <sup>nd</sup>	Hegenberger	F(30) (24.3)	E (38.5)	06
7	I-880	SB	SR 262/Mission	Dix Landing (off)	F(30) (28.8)	A (61.1)	92,06
8	SR 13	NB	Moraga Ave.	Hiller (Sig)	F(30) (20.1)	E (40.7)	06
9	SR 84	EB	Toll Plaza	Thornton	F(30) (28.3)	E (37.6)	06
10	Tennyson	EB	Hesperian	I-880	F (11.5)	E(14.2)	06
11	Decoto	WB	SH 238/Mission	Union Square	F(8.7)	E(10.5)	91- 94,96,98,00-06
12	SR 123 San Pablo	NB	Allston	University	F(5.7)	E(8.8)	98,00,06
13	I-580/SR 24 Interchange		SR 24 WB	I-580 EB	F (18.5)	B(43.9)	06
A.M. PEAK PERIOD							
14	SR 84	WB	I-205 (SJ Co)	Peralta	F (9.7)	D(14.7)	06
15	SR 13	NB	Carson/Redwood	Joaquin Miller	F(20) 17.3	E (34.4)	06

## **Overall Average Speed**

The overall average speeds improved both on freeways and arterials. The travel time surveys showed an increase of 2.6 miles per hour on the freeway system and 1.1 miles per hour on the arterials during the p.m. peak period.

## **ORIGIN-DESTINATION SURVEYS**

Peak period travel times were surveyed for ten pairs of Origin and Destinations (O-D) in Alameda County for auto, nine pairs for transit, and in one case, bicycle, and in another case a HOV lane.

Of the nine O-D pairs for transit, travel times have improved on 4 pairs and worsened on 5. The largest transit travel improvement was between Fremont and San Jose where the travel time decreased by 26% (111 minutes to 82 minutes). The largest increase in transit travel time was between Emeryville and Berkeley where the travel time increased by 56% (45 minutes to 70 minutes).

Auto travel times have improved on all 10 pairs with the exception of travel between Alameda and Oakland, where the travel time was almost the same as 2006 with an increase by only one minute. The largest improvement was between Fremont and Pleasanton where the auto travel time decreased by 33% or 13 minutes, (39 minutes to 26 minutes).

Travel times by both auto and transit decreased on four pairs: Hayward-Newark, Fremont-Pleasanton, Fremont-San Jose, and Fremont-Alameda. On the other hand, travel times by auto and transit worsened between Alameda and Oakland. As before, the worst transit commute was between Fremont and Pleasanton, although the travel time has decreased from 181 minutes in 2006 to 145 minutes in 2008. For the O-D pairs studied, transit travel times range between 2-5 times longer than auto travel, similar to 2006 results.

## **BICYCLE COUNTS**

For the fourth time, bicycle count data is included in the LOS Monitoring Report. Since 2002, bicycle counts have been collected by the local jurisdictions at twelve (12) major intersections across the County for the LOS Monitoring Study. Counts were collected at the same locations in 2008. In 2008, 8 of the 12 intersections showed an increase in bike usage and 4 showed a decrease. The highest volume increase was at Milvia Street and Hearst Avenue in Berkeley with 82 more bicycles than 2006. The highest decrease in bike usage was in Fremont at Paseo Padre Parkway and Mowry Avenue where the bike counts decreased by 27% from 22 in 2006 bicycles to 16 in 2008 or 6 bicycles.